

In the Specification

Please amend the "Cross-reference to Related Applications" paragraph appearing at page 2, lines 1-9, as follows:

The present application claims the benefit under 35 U.S.C. § 119(e) of U.S. Provisional Application 60/158,650, filed 8 October 1999, titled SYSTEM FOR CONSTRAINT-BASED PROJECT SCHEDULING AND RESOURCE OPTIMIZATION, which is hereby incorporated by reference. It This Application also contains material in common with co-pending U.S. utility applications No. Application 09/684,075, filed October 8, 2000, attorney Docket No. 0544MH-36340, titled SYSTEM FOR PLANNING A NEW PRODUCT PORTFOLIO, and No. with co-pending U.S. Application 09/688,032, filed October 8, 2000, attorney docket No. 0544MH-36338, titled SYSTEM FOR PLANNING A NEW PRODUCT RELEASE, both filed concurrently herewith, and both of which are hereby incorporated by reference.

Please amend the paragraph appearing at page 7, line 15 through page 8, line 2, as follows:

Figure 1 illustrates the planning process generally at a high corporate level. The portfolio planner system resides on a server 10 which is accessed directly or indirectly by the various people involved in the planning process. Those people include program managers and resource managers 12 who preferably access the server 10 through one or more web servers 14. program Program managers and resource managers 12 access a login web page 16 that gives them access to the underlying web pages 18 used to manipulate data and generally access an underlying database 20.

Please amend the paragraph appearing at page 9, lines 8-15, as follows:

Referring to Figure 3, each product under consideration for development may be developed by one or more alternate projects. In this example, Project

*A3*  
Product A can be developed by a project X 40, which is currently selected as the active project for this project product. Only one development project is planned for any single project product to prevent different development projects for a product from being pursued simultaneously. Portfolio planners can select alternate projects, such as project Y 42 or Project project Z 44, to assess the impact on overall profitability and scheduling of these alternate projects, but only one project at a time is selected.

Please amend the paragraph appearing at page 12, lines 5-11, as follows:

*A4*  
Figure 6 illustrates a simple example of the time element as it relates to the project projections used in the preferred embodiment. A graph 74 includes three profit curves 76, 78, 80 which are shifted in time to represent different product introduction dates. ~~In~~ In this example, the peaks of the curves diminish as the product is introduced later. At some point, there may be only minimal profits if the product is introduced too late. The total profits over the lifetime of a product is found by integrating user the separate profit curves.

Please amend the paragraph appearing at page 15, lines 1-6, as follows:

*A5*  
During the planning stage, resources are preferably dealt with at a higher level than is needed for detailed scheduling. The same is true for scheduling of tasks; larger tasks often need to be broken down into subtasks at the scheduling level in order to effectively schedule resources and monitor progress. At the same time, financial considerations are not part of the detailed scheduling process, and so are not included once the portfolio mix has been determined.

Please amend the paragraph appearing at page 15, line 18 through page 16, line 6, as follows:

*A6*  
While the portfolio planner is used primarily by strategic management, the development scheduler is used primarily by project managers and resource

managers. The preferred relationship between the various users and the scheduler is illustrated in Figure 9. The scheduling system is implemented on server 120, where it can be accessed by all users that need access. In this diagram, master planners 122 are the strategic managers responsible for selecting the product mix as described above. Their responsibility does not completely cease once the portfolio has been defined, however, because schedules may need to change as a result of unplanned or unforeseen circumstances. Generally, the master planners 122 are not involved in the day to day operation of the scheduler 120, but only become involved if a change is needed to the schedule.

Please amend the paragraphs appearing at page 16, line 21 through page 17, line 12, as follows:

Resource managers planners 128 use the scheduler on server 120 to 120 to monitor and update the status of the resources for which they are responsible. If the capacity of a resource changes, this information is entered into the scheduler. Loss of capacity may impact the ability to meet scheduled deadlines, which raises a flag to project managers 124 and may require intervention by master planners 122. Resource planners are also responsible for ensuring that required materials are available. Because some of the required materials are obtained from outside suppliers, resource planners 128 use supply chain tools, such as those available from i2 Technologies, to track suppliers and ensure that all required materials are ready in time. If required, materials will not be ready, the effect on the schedule is the same as if a required resource would not be available. This may again necessitate a change to the schedule by master planners 122.

Application administrators 130 monitor functioning of the system, and assist others in using it. They generally have no input regarding schedules.

Please amend the paragraph appearing at page 20, line 19 through page 21, line 3, as follows:

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*A8*

Tasks also have a definition, as shown in Figure 13. Task 200 is assigned a type 202, which is generally defined to be a work task. Work tasks have one or more resource requirements. A task may also be given a type of milestone, which is simply a placeholder used for management purposes to indicate that a project milestone has been reached. Milestone tasks have neither resource requirements nor a duration.

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Please amend the paragraph appearing at page 22, lines 1-5, as follows:

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*A9*

Ability 214 is the requirement for a minimum competency or experience level for the resource. If a higher competency resource is used for the task, the duration may be shortened by an amount proportional to the skill differential. The change to duration based upon competency is completely application dependent, and must be defined in advance.

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